Claims

1. A method for stabilizing a macrolide compound expressed by the formula (1), wherein a macrolide compound expressed by the formula (1) and a cyclodextrin are both made to be present:

(in the formula (1),

n is an integer from 0 to 4;

$$_{\text{W is}} = \text{or} \quad \overset{\text{H}}{\longrightarrow} \overset{\text{O}}{\longrightarrow} \overset{\text{H}}{\longrightarrow}$$

 R^2 , R^{3a} , R^{3b} , R^4 , R^{5a} , R^{5b} , R^{6a} , R^{6b} , R^{7a} , R^{7b} , R^8 , R^{9a} , R^{9b} , R^{10} , R^{16a} , R^{16b} , R^{17a} , R^{17b} , R^{na} and R^{nb} are the same as or different from each other and each represents

- (1) a hydrogen atom,
- (2) a hydroxyl group,
- (3)
 - a) a C_{1-22} alkyl group,
- b) a C_{1-22} alkoxyl group,
- c) ArCH₂O- (in which Ar is a C_{6-14} aryl group or a 5-

membered to 14-membered heteroaryl group, each of which may have a substituent),

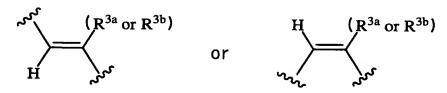
- d) a formyloxy group,
- e) a C_{2-22} acyloxy group,
- f) an unsaturated C_{3-23} acyloxy group,
- g) $R^{co}COO-$ (where R^{co} is a C_{6-14} aryl group, a 5-membered to 14-membered heteroaryl group, a C_{1-22} alkoxyl group, an unsaturated C_{2-22} alkoxyl group, a C_{6-14} aryloxy group or a 5-membered to 14-membered heteroaryloxy group, each of which may have a substituent),
 - h) a C_{1-22} alkylsulfonyloxy group,
 - i) a C_{6-14} arylsulfonyloxy group or
- j) $R^{s1}R^{s2}R^{s3}SiO-$ (where R^{s1} , R^{s2} and R^{s3} are the same as or different from each other and are each represents a C_{1-6} alkyl group or a C_{6-14} aryl group), each of which may have a substituent,
 - (4) a halogen atom or
- (5) $R^{N1}R^{N2}N-R^{M}-$ (in which R^{M} is a single bond or -CO-O-; R^{N1} and R^{N2} are
- 1) the same as or different from each other and each represents
 - a) a hydrogen atom or
 - b)
- (i) a C_{1-22} alkyl group,
- (ii) an unsaturated C_{2-22} alkyl group,
- (iii) a C_{2-22} acyl group,

- (iv) an unsaturated C_{3-23} acyl group,
- (v) a C_{6-14} aryl group,
- (vi) a 5-membered to 14-membered heteroaryl group,
- (vii) a C₇₋₁₅ aralkyl group,
- (viii) a C_{1-22} alkylsulfonyl group or
- (ix) a $C_{6\text{--}14}$ arylsulfonyl group, each of which may have a substituent, or
- 2) R^{N1} and R^{N2} , together with the nitrogen atom to which they bound, represents a 3-membered to 14-membered nitrogen-containing non-aromatic heterocyclic group which may have a substituent); and

 R^{12} and R^{14} are the same as or different from each other and each represents a hydrogen atom or a C_{1-6} alkyl group which may have a substituent,

provided that

1) R^2 , together with either R^{3a} or R^{3b} , may form a partial structure:



2) R^{3a} and R^{3b} , together with the carbon atom to which they bound, may form a ketone structure (=0) or an oxime structure {= NOR^{ox} (in which R^{ox} represents a C_{1-22} alkyl group, an unsaturated C_{2-22} alkyl group, a C_{6-14} aryl group, a 5-membered to 14-membered heteroaryl group or a C_{7-15} aralkyl group, each of which may have a substituent)},

3) either R^{3a} or R^{3b} and either R^{6a} or R^{6b} may bound with an oxygen atom via the carbon atom to which they bound to form a partial structure:

$$(R^{6a} \text{ or } R^{6b})$$
 R^{5b}
 R^{5a}
 R^{4}
 $(R^{3a} \text{ or } R^{3b})$

4) R^4 , together with either R^{5a} or R^{5b} , may form a partial structure:

- 5) R^{5a} and R^{5b} , together with the carbon atom to which they bound, may form a ketone structure (=0) or an oxime structure {=NOR^{ox} (in which R^{ox} has the same meaning as above)},
- 6) R^{6a} and R^{6b} , together with the carbon atom to which they bound, may form a spirooxirane ring or an exomethylene group,
- 7) either R^{6a} or R^{6b} and either R^{7a} or R^{7b} , together with the carbon atom to which they bound, may form a 1,3-dioxolane ring,
- 8) R^{7a} and R^{7b} , together with the carbon atom to which they bound, may form a ketone structure (=0) or an oxime structure {= NOR^{ox} (in which R^{ox} has the same meaning as

above)},

9) R^8 , together with either R^{9a} or R^{9b} , may form a partial structure:

- 10) R^{9a} and R^{9b} , together with the carbon atom to which they bound, may form a ketone structure (=0) or an oxime structure {= NOR^{ox} (in which R^{ox} has the same meaning as above)}, and
- 11) R^{na} and R^{nb} , together with the carbon atom to which they bound, may form a ketone structure (=0) or an oxime structure {=NOR^{ox} (in which R^{ox} has the same meaning as above)}.)
- 2. The method for stabilizing a macrolide compound according to claim 1, wherein the macrolide compound expressed by the formula (1) is a macrolide compound expressed by the formula (1-1):

in the formula (1-1), n, R^2 , R^{3a} , R^{3b} , R^4 , R^{5a} , R^{5b} , R^{6a} , R^{6b} ,

(1-1)

 R^{7a} , R^{7b} , R^8 , R^{9a} , R^{9b} , R^{10} , R^{12} , R^{14} , R^{16a} , R^{16b} , R^{17a} , R^{17b} , R^{na} and R^{nb} have the same meanings as the definitions for the formula (1) in claim 1.

The method for stabilizing a macrolide compound according to claim 2, wherein the macrolide compound expressed by the formula (1-1) is a compound selected from the group consisting of (8E,12E,14E)-3,6,7,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6-dihydroxy-6,10,12,16,20-pentamethyl-21-oxo-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,16,21tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,20,21tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-3,6,7,16,21pentahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-3,6,7,20,21pentahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (4E,8E,12E,14E)-7-acetoxy-3,6,21trihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-4,8,12,14-tetraen-11-olide; (8E,12E,14E)-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-7-propanoyloxy-18,19epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19-

epoxydocosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3, 5, 6, 21-tetrahydroxy-6, 10, 12, 16, 20-pentamethyl-18, 19epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-5,7diacetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-3,7-diacetoxy-6,21-dihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-6-acetoxymethyl-3,6,21-trihydroxy-10,12,16,20tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E, 12E, 14E) -7-acetoxy-3, 6, 17, 21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,20-trihydroxy-6,10,12,16-tetramethyl-18,19-epoxyheneicosa-8,12,14-trien-11-olide; (4E,8E,12E,14E)-3,6,7,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-4,8,12,14tetraen-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,20tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (12E, 14E) -3, 6, 21-trihydroxy-6, 10, 12, 16, 20-pentamethyl-9oxo-18,19-epoxytricosa-12,14-dien-11-olide; (8E,12E,14E)-7acetoxy-3,6,21-trihydroxy-6,10,16,20-tetramethyl-18,19epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-3, 6, 21-trihydroxy-2, 6, 10, 12, 16, 20-hexamethyl-18, 19epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-3,5,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19-

epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-3,6,21-trihydroxy-6,12,16,20-tetramethyl-18,19epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-6acetoxymethyl-3,6,7,21-tetrahydroxy-10,12,16,20tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E, 12E, 14E) -3, 6, 7-trihydroxy-6, 10, 12, 16, 20-pentamethyl-21oxo-18,19-epoxytricosa-8,12,14-trien-11-olide; a 3-position isomer of (8E, 12E, 14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-10,12,16,20-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-6-acetoxy-3,7,21-trihydroxy-10,12,16,20-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-3,6,7,21-tetrahydroxy-2,6,10,12,16,20-hexamethyl-18,19-epoxytricosa-8,12,14trien-11-olide; (8E,12E,14E)-3,7,21-trihydroxy-10,12,16,20tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (4E, 8E, 12E, 14E) -7-acetoxy-3, 6-dihydroxy-6, 10, 12, 16, 20pentamethyl-21-oxo-18,19-epoxytricosa-4,8,12,14-tetraen-11olide; (8E, 12E, 14E) -7-acetoxy-3, 21-dihydroxy-10, 12, 16, 20tetramethyl-18,19-epoxy-6,6-(epoxymethano)tricosa-8,12,14trien-11-olide; (4E,8E,12E,14E)-7-acetoxy-3,21-dihydroxy-10,12,16,20-tetramethyl-18,19-epoxy-6,6-(epoxymethano) tricosa-4,8,12,14-tetraen-11-olide; (8E, 12E, 14E) -3, 7, 21-trihydroxy-10, 12, 16, 20-tetramethyl-18,19-epoxy-6,6-(epoxymethano)tricosa-8,12,14-trien-11-

olide; (4E,8E,12E,14E)-6,7-diacetoxy-3,21-dihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-4,8,12,14tetraen-11-olide; (8E,12E,14E)-6,7-diacetoxy-3,21dihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,16trihydroxy-6,10,12,16,20-pentamethyl-21-oxo-18,19epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-3,6,21,22-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (4E,8E,12E,14E)-7-acetoxy-3,6,17,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-4,8,12,14-tetraen-11-olide; (8E, 12E, 14E) - 7 - acetoxy - 3, 6, 17 - trihydroxy - 6, 10, 12, 16 tetramethyl-18,19-epoxyheneicosa-8,12,14-trien-11-olide; (8E, 12E, 14E) -7-acetoxy-3, 5, 6, 21, 22-pentahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,16-trihydroxy-6,10,12,16-tetramethyl-18,19-epoxyheneicosa-8,12,14-trien-11-olide; (8E, 12E, 14E) -3, 6, 7, 21-tetrahydroxy-6, 10, 16, 20tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E, 12E, 14E) -7-acetoxy-3, 6, 17, 21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,17-trihydroxy-6,10,12,16,18-pentamethyl-18,19-epoxyheneicosa-8,12,14trien-11-olide; and (8E,12E,14E)-7-acetoxy-3,6,21trihydroxy-6,10,12,16,20-pentamethyl-5-oxo-18,19epoxytricosa-8,12,14-trien-11-olide.

4. The method for stabilizing a macrolide compound according to claim 1, wherein the macrolide compound expressed by the formula (1) is a macrolide compound expressed by the formula (1-2):

$$R^{17b}$$
 R^{17b}
 R^{10}
 R^{9a}
 R^{9a}
 R^{5b}
 R^{5b}
 R^{5a}
 R^{5a}
 R^{3a}
 R^{3a}
 R^{3a}
 R^{3b}
 R^{3b}
 R^{3b}
 R^{3b}

in the formula (1-2), n R^2 , R^{3a} , R^{3b} , R^4 , R^{5a} , R^{5b} , R^{6a} , R^{6b} , R^{7a} , R^{7b} , R^8 , R^{9a} , R^{9b} , R^{10} , R^{12} , R^{14} , R^{16a} , R^{16b} , R^{17a} , R^{17b} , R^{na} and R^{nb} have the same meanings as the definitions for the formula (1) in claim 1.

- 5. The method for stabilizing a macrolide compound according to claim 4, wherein the macrolide compound expressed by the formula (1-2) is (8E,12E,14E,18E)-7-acetoxy-3,6,21,22-tetrahydroxy-6,10,12,16,20-pentamethyltricosa-8,12,14,18-tetraen-11-olide or (8E,12E,14E,18E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyltricosa-8,12,14,18-tetraen-11-olide.
- 6. The method for stabilizing a macrolide compound according to any of claims 1 to 5, wherein the cyclodextrin is one selected from the group consisting of β -cyclodextrin, γ -cyclodextrin, partially methylated β -cyclodextrin,

dimethyl- β -cyclodextrin, glycosyl- β -cyclodextrin and hydroxypropyl- β -cyclodextrin.

7. A method for producing a macrolide compound selected from the group consisting of (8E,12E,14E)-3, 6, 7, 21-tetrahydroxy-6, 10, 12, 16, 20-pentamethyl-18, 19epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-3,6-dihydroxy-6,10,12,16,20-pentamethyl-21-oxo-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-3,6,16,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-3,6,20,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-3, 6, 7, 16, 21-pentahydroxy-6, 10, 12, 16, 20-pentamethyl-18, 19epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-3, 6, 7, 20, 21-pentahydroxy-6, 10, 12, 16, 20-pentamethyl-18, 19epoxytricosa-8,12,14-trien-11-olide; (4E,8E,12E,14E)-7acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19epoxytricosa-4,8,12,14-tetraen-11-olide; (8E,12E,14E)-3, 6, 21-trihydroxy-6, 10, 12, 16, 20-pentamethyl-7-propanoyloxy-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19epoxydocosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3, 5, 6, 21-tetrahydroxy-6, 10, 12, 16, 20-pentamethyl-18, 19epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-5,7-

diacetoxy-3, 6, 21-trihydroxy-6, 10, 12, 16, 20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-3,7-diacetoxy-6,21-dihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-6-acetoxymethyl-3, 6, 21-trihydroxy-10, 12, 16, 20tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E, 12E, 14E) -7-acetoxy-3, 6, 17, 21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,20-trihydroxy-6,10,12,16-tetramethyl-18,19-epoxyheneicosa-8,12,14-trien-11-olide; (4E,8E,12E,14E)-3,6,7,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-4,8,12,14tetraen-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,20tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (12E, 14E) -3, 6, 21-trihydroxy-6, 10, 12, 16, 20-pentamethyl-9oxo-18,19-epoxytricosa-12,14-dien-11-olide; (8E,12E,14E)-7acetoxy-3,6,21-trihydroxy-6,10,16,20-tetramethyl-18,19epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-3,6,21-trihydroxy-2,6,10,12,16,20-hexamethyl-18,19epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-3,5,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7acetoxy-3,6,21-trihydroxy-6,12,16,20-tetramethyl-18,19epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-6-

acetoxymethyl-3,6,7,21-tetrahydroxy-10,12,16,20tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E, 12E, 14E) -3, 6, 7-trihydroxy-6, 10, 12, 16, 20-pentamethyl-21oxo-18,19-epoxytricosa-8,12,14-trien-11-olide; a 3-position isomer of (8E, 12E, 14E) -7-acetoxy-3, 6, 21-trihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-10,12,16,20-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-6-acetoxy-3,7,21-trihydroxy-10,12,16,20-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E, 12E, 14E) -3, 6, 7, 21-tetrahydroxy-2,6,10,12,16,20-hexamethyl-18,19-epoxytricosa-8,12,14trien-11-olide; (8E,12E,14E,18E)-7-acetoxy-3,6,21,22tetrahydroxy-6,10,12,16,20-pentamethyltricosa-8,12,14,18tetraen-11-olide; (8E,12E,14E)-3,7,21-trihydroxy-10,12,16,20-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (4E,8E,12E,14E)-7-acetoxy-3,6-dihydroxy-6,10,12,16,20-pentamethyl-21-oxo-18,19-epoxytricosa-4,8,12,14-tetraen-11-olide; (8E,12E,14E)-7-acetoxy-3,21dihydroxy-10,12,16,20-tetramethyl-18,19-epoxy-6,6-(epoxymethano)tricosa-8,12,14-trien-11-olide; (4E, 8E, 12E, 14E) - 7 - acetoxy - 3, 21 - dihydroxy - 10, 12, 16, 20 tetramethyl-18,19-epoxy-6,6-(epoxymethano)tricosa-4,8,12,14-tetraen-11-olide; (8E,12E,14E)-3,7,21-trihydroxy-10, 12, 16, 20-tetramethyl-18, 19-epoxy-6, 6-(epoxymethano)tricosa-8,12,14-trien-11-olide;

(4E, 8E, 12E, 14E) -6, 7-diacetoxy-3, 21-dihydroxy-6, 10, 12, 16, 20pentamethyl-18,19-epoxytricosa-4,8,12,14-tetraen-11-olide; (8E, 12E, 14E) -6, 7-diacetoxy-3, 21-dihydroxy-6, 10, 12, 16, 20pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E, 12E, 14E) -7-acetoxy-3, 6, 16-trihydroxy-6, 10, 12, 16, 20pentamethyl-21-oxo-18,19-epoxytricosa-8,12,14-trien-11olide; (8E,12E,14E)-7-acetoxy-3,6,21,22-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (4E,8E,12E,14E)-7-acetoxy-3,6,17,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-4,8,12,14tetraen-11-olide; (8E,12E,14E)-7-acetoxy-3,6,17-trihydroxy-6,10,12,16-tetramethyl-18,19-epoxyheneicosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,5,6,21,22-pentahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,16-trihydroxy-6,10,12,16-tetramethyl-18,19-epoxyheneicosa-8,12,14-trien-11-olide; (8E,12E,14E)-3,6,7,21-tetrahydroxy-6,10,16,20tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E, 12E, 14E) -7-acetoxy-3, 6, 17, 21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,17-trihydroxy-6,10,12,16,18-pentamethyl-18,19-epoxyheneicosa-8,12,14trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-5-oxo-18,19-epoxytricosa-8,12,14trien-11-olide; and (8E,12E,14E,18E)-7-acetoxy-3,6,21trihydroxy-6,10,12,16,20-pentamethyltricosa-8,12,14,18tetraen-11-olide, wherein a cyclodextrin is made to be present in a culture broth of actinomycetes having an ability of producing the macrolide compound.

- 8. The method according to claim 7, wherein the macrolide compound is (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide.
- 9. The method according to claim 7 or 8, wherein the cyclodextrin is one selected from the group consisting of β -cyclodextrin, γ -cyclodextrin, partially methylated β -cyclodextrin, dimethyl- β -cyclodextrin, glycosyl- β -cyclodextrin and hydroxypropyl- β -cyclodextrin.